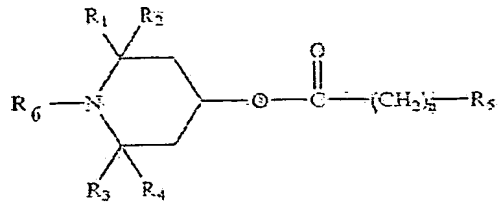
CLAIMS

1. Use of a compound of formula:



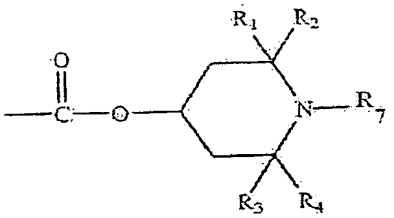
(I)

in which:

R_6 is oxyl, hydrogen or hydroxyl, R_1, R_2, R_3 and R_4 are selected independently of one another from:

- hydrogen
- alkyl having from 1 to 12 carbon atoms,
- alkenyl having from 2 to 12 carbon atoms,
- alkynyl with from 2 to 12 carbon atoms, or

- R_1 and R_2 together are tetramethylene or pentamethylene;
- R_5 is hydrogen,
- alkyl having from 1 to 12 carbon atoms,
- cycloalkyl having from 3 to 8 carbon atoms,
- alkenyl with from 2 to 12 carbon atoms,
- alkynyl having from 2 to 12 carbon atoms, or



(II)

in which:

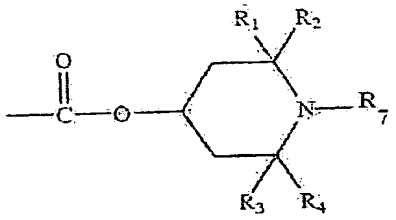
R_1, R_2, R_3 and R_4 are as defined above,

R_7 is the same as or different from R_6 and is selected from hydrogen, oxyl or hydroxyl, and

n is a whole number from 1 to 30,

for the preparation of a pharmaceutical composition for veterinary or human use or of a medicament for the therapeutic or prophylactic treatment of neurodegenerative diseases.

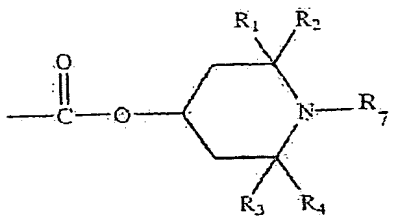
2. Use according to Claim 1 in which, in formula (I), R_1, R_2, R_3 and R_4 are, independently of one another, an alkyl having from 1 to 6 carbon atoms, R_6 is hydrogen, oxyl or hydroxyl, and R_5 is:



(II)

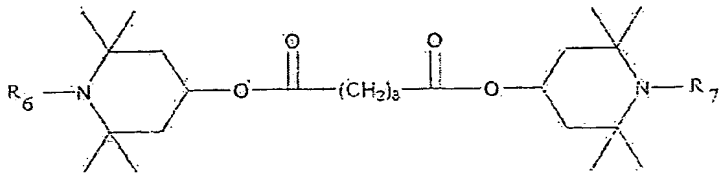
in which R_1, R_2, R_3 and R_4, independently of one another, are an alkyl having from 1 to 6 carbon atoms, R_7 is oxyl, hydrogen or hydroxyl, and n is a whole number from 2 to 14.

3. Use according to Claim 1 or Claim 2 in which R_1, R_2, R_3 and R_4 are, independently of one another, an alkyl having from 1 to 3 carbon atoms and R_5 is:



in which R_1, R_2, R_3 and R_4 are, independently of one another, an alkyl having from 1 to 3 carbon atoms, R_7 is oxyl, hydrogen or hydroxyl, and n is a whole number from 6 to 10.

4. Use according to any one of Claims 1 to 3 in which the compound is of formula:



(III)

in which R_6 and R_7 are identical or different and are selected from oxyl, hydrogen and hydroxyl.

5. Use according to any one of Claims 1 to 4 in which the neurodegenerative disease is selected from Parkinson's disease, Alzheimer's disease, brain lesion due to ischaemia-reperfusion, traumatic brain lesion, neuropathy due to HIV, Down's syndrome, diabetic polyneuropathy, muscular dystrophy, multiple sclerosis, Huntington's disease, prion disease, late dyskinesia, tauopathy, demyelinating pathologies and Lou Gherig's syndrome.

6. Use of a compound as identified in any one of Claims 1 to 4 for the treatment of pathologies selected from lesions due to ischaemia-reperfusion in the heart, kidneys, lungs, liver and intestine, hypertension, diabetes, cancer, shock, cystic fibrosis, virus infections, toxicity due to drugs or radiation (radiotherapy or radiation protection), inflammation, epilepsy, atherosclerosis, aging, hyperlipidaemia, hypercholesterolaemia, rheumatoid arthritis and for the treatment of pain or sepsis.

7. Use according to any one of the preceding claims in which the pharmaceutical or veterinary composition or medicament is suitable for oral, parenteral, inhalatory or topical administration.

8. Use according to any one of the preceding claims in which the pharmaceutical or veterinary composition or medicament is in a dosage form suitable for administration of the compound in quantities of from 0.01 to 200 mg/kg of body weight, preferably from 0.5 to 20 mg/kg of body weight.

9. Pharmaceutical compositions comprising an effective anti-oxidizing quantity of a compound of formula (I) as defined in any one of Claims 1 to 4 in which R_6 is hydrogen or oxyl and R_7, if present, is identical to or different from R_6 and is selected from oxyl, hydrogen and hydroxyl, and a vehicle which is physiologically acceptable for administration to man or to animals.

10. A pharmaceutical composition comprising an effective anti-oxidizing quantity of a compound of formula (I) as defined in Claim 1 in which R_5 is a group of formula (II) and in which R_6 and R_7 are selected, independently of one another, from hydrogen, oxyl and hydroxyl, provided that both R_6 and R_7 are not hydroxyl, and a vehicle which is physiologically acceptable for administration to man or to animals.